

Claims

1
2
3 ^{Sub} 1. Within a document server, a computer-implemented method for
4 customizing a requested document comprising at least one hypertext markup
5 language (HTML) element, the method comprising:

6 parsing the document to generate therefrom a corresponding document
7 object model (DOM) including at least one object;
8 obtaining a style sheet including at least one rule directed to a target device;
9 applying the at least one rule of the style sheet to the DOM; and
10 flattening the DOM to generate therefrom a corresponding transformed
11 document suitable for display by the target device.

12
13 2. The method of claim 1, wherein the style sheet comprises a cascading
14 style sheet (CSS).

15
16 3. The method of claim 1, wherein the obtaining step comprises:
17 identifying a target device for displaying the document; and
18 identifying at least one rule of a style sheet directed to the identified target
19 device.

20
21 4. The method of claim 3, further comprising:

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18
- 19
- 20
- 21

receiving a request for a document from a client program.

5. The method of claim 4, wherein the client program comprises a Web browser.

6. The method of claim 1, wherein the style sheet includes rules directed to at least two different target devices.

7. The method of claim 1, wherein the style sheet is stored within a separate portion of the document.

8. The method of claim 1, wherein the style sheet and the document are stored as logically separate data files.

9. The method of claim 1, further comprising:
transmitting the transformed document to a client program.

10. The method of claim 1, the transforming step comprising:
removing at least one object of the DOM in response to an indication within
the style sheet to remove a corresponding HTML element from the
document.

1
2 11. A system for customizing a requested document comprising at least
3 one hypertext markup language (HTML) element, the system comprising:

4 a parsing module configured to parse the document to generate therefrom

5 a corresponding document object model (DOM) including at least one

6 object;

7 a style sheet access module configured to obtain a style sheet including at

8 least one rule directed to a target device;

9 a style sheet application module configured to apply the at least one rule of

10 the style sheet to the DOM; and

11 a flattening module configured to flatten the DOM to generate therefrom a

12 corresponding transformed document suitable for display by the

13 target device.

14
15 12. The system of claim 11, wherein the style sheet comprises a cascading
16 style sheet (CSS).

17
18 13. The system of claim 11, wherein the style sheet access module
19 comprises:

20 a target device identification module configured to identify a target device

21 for displaying the document; and

14. The system of claim 13, further comprising:
a request reception module configured to receive a request for a document
from a client program.

15. The system of claim 14, wherein the client program comprises a Web browser.

16. The system of claim 11, wherein the style sheet includes rules directed to at least two different target devices.

17. The system of claim 11, wherein the style sheet is stored within a separate portion of the document.

18. The system of claim 11, wherein the style sheet and the document are stored as logically separate data files.

19. The system of claim 11, further comprising:

1 a transmission module configured to transmit the transformed document to
2 a client program.

3
4 20. The system of claim 11, wherein the style sheet application module
5 comprises:

6 an object removal module configured to remove at least one object of the
7 DOM in response to an indication within the style sheet to remove a
8 corresponding HTML element from the document.

9
10 21. An article of manufacture comprising a program storage medium
11 readable by a processor and embodying one or more instructions executable by the
12 processor to perform a computer-implemented method for customizing a requested
13 document comprising at least one hypertext markup language (HTML) element, the
14 method comprising:

15 parsing the document to generate therefrom a corresponding document
16 object model (DOM) including at least one object;
17 obtaining a style sheet including at least one rule directed to a target device;
18 applying the at least one rule of the style sheet to the DOM; and
19 flattening the DOM to generate therefrom a corresponding transformed
20 document suitable for display by the target device.

22. The article of manufacture of claim 21, wherein the style sheet comprises a cascading style sheet (CSS).

23. The article of manufacture of claim 21, wherein the obtaining step comprises:

identifying a target device for displaying the document; and

identifying at least one rule of a style sheet directed to the identified target device.

24. The article of manufacture of claim 23, the method further comprising:
receiving a request for a document from a client program.

25. The article of manufacture of claim 24, wherein the client program comprises a Web browser.

26. The article of manufacture of claim 21, wherein the style sheet includes rules directed to at least two different target devices.

27. The article of manufacture of claim 21, wherein the style sheet is stored within a separate portion of the document.

